

**Commonwealth of Kentucky**  
**Division for Air Quality**  
***PERMIT STATEMENT OF BASIS***

**(DRAFT)**

Title V, Operating

**Permit: V-07-002**

**Osram Sylvania Products Incorporated**

**Versailles, KY 40383**

February 27, 2007

Sandra M. Cooke, Reviewer

SOURCE ID:	<b>21-239-00008</b>
SOURCE A.I. #:	<b>4236</b>
ACTIVITY ID:	<b>APE20070001</b>

**SOURCE DESCRIPTION:**

An application for renewal of a Title V permit was received from Osram Sylvania Products Incorporated, on November 9, 2006. The renewal incorporates some emission factor changes, based on results of stack tests conducted in February, 2006 (Appendix B, Renewal Application), but otherwise retains the same emissions and operational limits and equipment lists as those in the revised Title V permit issued in October of 2003.

Osram Sylvania Products Incorporated, the glass plant, manufactures glass casings for light bulbs that are sent to an adjacent lamp plant for finishing. Both lime and lead glasses are produced in continuous processes. Raw materials are stored, conveyed, and mixed before going to the respective melting furnaces. The glass is coated and etched with fluorides upon exiting the melting furnaces. The fluorides from the plant are mainly emitted from the etching process. The spent glass is crushed and the glass cullet is used as ingredients in subsequent batches. The major hazardous pollutants emitted from the source are lead, hydrogen fluoride, and antimony. Particulate matter is the major emission of the ingredient handling operations.

**COMMENTS:**

Emissions control equipment includes Baghouses (filters), Electrostatic Precipitator, Activated Carbon filter, Tube Shell Condenser, and a Centrifuge. Most control efficiencies are 95-98 %.

Emission factors came from stack testing results, applicable sections of AP 42, and previously approved emission factors.

Applicable regulations include 401 KAR 59:010, 401 KAR 61:020, and 401 KAR 63:021.

**EMISSION AND OPERATING CAPS DESCRIPTION:**

In 1998, the glass plant was issued a synthetic minor operating permit (F-98-010), with limits on most of the lime glass manufacturing units to preclude PSD applicability. These limits were still in force under the subsequent Title V Permits (V-99-023 and V-99-023 R1) and will be under the renewal (V-07-002) Title V permit.

In 2003, the source applied for an increase in production rate for the Lime Glass Melting Furnace, but without an increase in emissions allowance. The increase was granted and incorporated in V-99-023 R1.

A requirement has been added to this renewal that no hazardous air pollutant source equipment (in Group 2) shall be operated without the applicable control equipment being operated.

EMISSIONS SUMMARY:

<b>Pollutant</b>	<b>Potential (tpy)</b>	<b>Controlled (tpy)</b>
PM/PM <sub>10</sub>	1741.60	66.29
VOC	1544.85	62.69
NO <sub>x</sub>	888.43	888.43
CO	888.43	605.59
SO <sub>2</sub>	32.10	27.87
<b>HAPS</b>		
Antimony (Sb)	71.81	0.29
Lead (Pb)	133.23	2.12
HCl	11.79	1.18
HF	5.719	5.67
Methanol	29.66	2.97

**OPERATIONAL FLEXIBILITY:**

None.

**CREDIBLE EVIDENCE:**

This permit contains provisions that require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.